Date: Fri, 2 Apr 93 11:33:37 PST

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #411

To: Info-Hams

Info-Hams Digest Fri, 2 Apr 93 Volume 93 : Issue 411

Today's Topics:

Apple Packet Radio
ARRL/QST's advertising policies
ARRL living in the past? (was RE: motive ...)
Dayton 93
exam prep II

Metastability and Noise
OSCAR-22 frequencies
STS-56 SAREX Mission

Wanted: Best Source for Antenna Wire Where can I get old radio parts?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

\_\_\_\_\_\_

Date: Mon, 29 Mar 1993 07:08:02 GMT

From: swrinde!zaphod.mps.ohio-state.edu!sol.ctr.columbia.edu!ira.uka.de!

scsing.switch.ch!aragorn.unibe.ch!news@network.UCSD.EDU

Subject: Apple Packet Radio To: info-hams@ucsd.edu

In article <C4JwKL.7z@world.std.com>, surfer@world.std.com (Internet Surfer)
writes:

>I am looking for Apple // Programs SPECIFICALLY for packet.. especially >one called Apple Packet Radio.. If anyone knows where i can find one.. ie >PD or commercial.. I am interested..

> \72

### >N1NIG

>

Virtuoso is such a program it can be found on sumex-aim.stanford.edu in the /info-mac/app/virtuosoxx.hgx

vy 73 de Andreas HB9GAV

>

-----

Date: 2 Apr 93 16:40:21 GMT

From: usc!zaphod.mps.ohio-state.edu!uwm.edu!lll-winken.llnl.gov!catnip!

kc6sss@network.UCSD.EDU

Subject: ARRL/QST's advertising policies

To: info-hams@ucsd.edu

Someone remarked yesterday, explaining why the ARRL/QST does not take advertising from the Lambda ARC because "They don't take advertising from other organizations like religious organization, the African-American ARC, etc."

BZZZT WRONG!

Page 116, April '93 QST:

Chaverim International

(An Association of Jewish Radio Amateurs and their Friends)

Gee, there's a religious group that can buy advertising in QST.

I wonder how many others I would find if I were actually looking for them?

-----

Date: Fri, 2 Apr 1993 17:37:42 GMT

From: swrinde!gatech!concert!fletcher!hominy.cs.unca.edu!sampson@network.UCSD.EDU

Subject: ARRL living in the past? (was RE: motive ...)

To: info-hams@ucsd.edu

The ARRL is not in the business of supporting homo activity. It is their primary purpose to support the hobby of amateur radio. For those of you not wanting to join, thats your own decision. Personally, I feel the leagues probably better off without you. So go ahead and whine some more, but since your not supporting one of amateur radio's largest organizations on this continent - no ones going to listen to you.

The ARRL should not be faced with decisions of what lifestyles they should or

should not

accept. They exist to support a hobby - not a social group in society. If you want the league to provide you services, etc. - the idea is simple ---> Pay your dues (CLue: I doesnt matter this way what you are attracted to). Otherwise shutup because you're not a member, so it doesnt matter what you think about our organization. Hopefully this message is clear enough for the weakest of minds to comprehend. The league supports amateurs of all types (by lobbying, technical services, informational services, etc.) but the individuals lifestyle should not even be a part of this discussion. Lets get on with something interesting, this stupidity gets old.

Daryl

-----

Date: 2 Apr 93 03:59:34 GMT

From: noao!asuvax!gatech!enterpoop.mit.edu!uhog.mit.edu!mintaka.lcs.mit.edu!lynx!

mhald@arizona.edu
Subject: Dayton 93
To: info-hams@ucsd.edu

I intend to go to Dayton this year, but am looking for specifics (last time I drove there was in 1990).

I would like to find a document at some FTP site or a message from some kind, informed soul that has pre-arrival ticket purchase info. and directions (hey, it's been three years!) for within Ohio/Dayton to the arena (I assume it's still at HARA).

If possible, please include a promise of decent weather :)

Mail if you like, but I haven't seen much posted here in my newsgroup readings.

Thanks!

Mark

-----

Date: 2 APR 93 13:05:40

From: pa.dec.com!e2big.mko.dec.com!nntpd.lkg.dec.com!ryn.mro4.dec.com!

cimfie.enet.dec.com!taber@decwrl.dec.com

Subject: exam prep II To: info-hams@ucsd.edu In article <1993Apr1.161034.25170@hemlock.cray.com>, dadams@cray.com (David Adams) writes...

> "B. If the employee does not normally communicate with the
> manufacturing or distribution part of the company."
> 
>

>I cannot understand why! I could see some reason behind prohibiting >an equipment salesman from also being the VEC, but what does being >in touch with the manufacturing or distribution have to do with it?

Sales is "distribution." So people whose living depends on making radios and people whose living depends on distributing (including sales) radios cannot be VEs. People whose living depends on building PC's for a conglomerate that also makes radios can be VE's.

### >>>==>PStJTT

>

-----

Date: 2 Apr 93 17:15:57 GMT

From: news.tek.com!tekgen!brucec@uunet.uu.net

Subject: Metastability and Noise

To: info-hams@ucsd.edu

The question is whether or not noise has an effect on A) the number of metastability states (MSS's) encountered or B) on the length of time that MSS's persist given a thoroughly asynchronous D input to a flip-flop.

I am also looking for advice on how prove or dis-prove the independence of MSS's on noise. If you have measured MSS's I would like to hear how you did it.

This is a continuing 'thread', I am re-posting to widen the scope and hopefully get more responses.

## Thanks!

Bruce Cheney NI7M TriQuint Semiconductor Beaverton, OR

-----

Date: 2 Apr 93 17:54:03 GMT

From: pa.dec.com!decprl!decprl!boyd@decwrl.dec.com

Subject: OSCAR-22 frequencies

To: info-hams@ucsd.edu

Can someone mail me them? Thanks.

Boyd Roberts boyd@prl.dec.com

``When the going gets wierd, the weird turn pro...''

-----

Date: 2 Apr 93 18:33:05 GMT From: news-mail-gateway@ucsd.edu Subject: STS-56 SAREX Mission

To: info-hams@ucsd.edu

SB SAREX@AMSAT \$STS-56.001 STS-56 SAREX Mission

STS-56 Shuttle Amateur Radio Experiment (SAREX)
Information Sheet

Mission: STS-56 Space Shuttle Discovery

ATLAS-2 Spacelab Mission

Launch: April 6, 1993, 5:32 UTC

Orbit: 57 degree inclination, 160 nautical miles

Amateur Radio

Operators: Ken Cameron, KB5AWP, Ken Cockrell, KB5UAH,

Mike Foale, KB5UAC, Ellen Ochoa, KB5TZZ, and

Steve Oswald, KB5YSR

Modes: FM Voice

Prime callsign KB5AWP

Packet Radio Callsign W5RRR-1

2-way SSTV

Callsign W5RRR/S

ATV Uplink (prescheduled)

Frequencies: All operations in split mode. Do not transmit on

the downlink frequency.

Voice Freqs: Downlink: 145.55 MHz (Worldwide)

Uplinks: 144.91, 144.93, 144.95, 144.97, 144.99

MHz (Except Europe) 144.70, 144.75, 144.80 MHz (Europe only)

Note: the crew will not favor any specific uplink frequency, so your ability to work the crew will

be the "luck of the draw"

Packet Freqs: Downlink: 145.55 MHz
Uplink: 144.49 MHz

QSL Info: Send you QSL or Listeners Report to:

STS-56 QSL C/O Vienna Wireless Society P.O. Box 418 Vienna, VA 22183

Include a self addressed stamped envelope. Non-US stations should include the appropriate number of IRCs with your QSL or a 0.50 U.S. stamp on the envelope.

Report should include callsign, whether worked/heard, date, UTC time, mode, frequency, and QSO number for packet connects.

Info: Goddard Amateur Radio Club, WA3NAN, Greenbelt, Maryland SAREX Bulletins and Shuttle Retransmissions 3860 KHz, 7185 KHz, 14,295 KHz, 21,395 KHz, 28,650 KHz and 147.45 MHz (FM)

Johnson Space Center ARC, W5RRR, Houston, Texas SAREX Bulletins 7225 KHz, 14,280 KHz, 21,395 KHz, 28,650 KHz, (SSB) and 146.64 MHz (FM)

ARRL Amateur Radio Station, W1AW, Newington, CT SAREX News Bulletins 3990, 7290, 14,290, 18,160, 21,390, and 28,590 KHz and 147.555 MHz (FM)

Also, bulletins available on internet, via AMSAT ANS,

Compuserve, and your local PBSS.

School Group Participation: 18 school groups will participate

in SAREX with pre-scheduled direct contacts. These include 13 in the U.S., 2 in England, and one in Portugal, South Africa and Australia.

Prelaunch Keplerian Elements:

The following Keplerian Elements are provided by Gil Carman, WA5NOM at the Johnson Space Center ARC:

The planned launch date for STS-56 has now been set for April 6, 05:32 UTC.

1 00056U 93 96.29075346 .00055200 00000-0 16200-3 0 56 2 00056 57.0020 177.4323 0011289 286.7156 73.2672 15.91759473 20

Satellite: STS-56 Catalog number: 00056

Epoch time: 93096.29075346 = (6 APR 93 06:58:41.10 UTC)

Element set: JSC-005

Inclination: 57.0020 deg

RA of node: 177.4323 deg Space Shuttle Flight STS-56 Eccentricity: .0011289 Prelaunch Keplerian Elements Arg of perigee: 286.7156 deg Launch: 6 APR 93 05:32 UTC

Mean anomaly: 73.2672 deg

Mean motion: 15.91759473 rev/day G. L. Carman

Decay rate: 5.52000e-04 rev/day\*2 NASA Johnson Space Center

Epoch rev: 2

/EX

-----

Date: 2 Apr 93 17:08:44 GMT

From: news.tek.com!tekgen!brucec@uunet.uu.net Subject: Wanted: Best Source for Antenna Wire

To: info-hams@ucsd.edu

I am looking for a LOT of antenna wire to put up some antenna's in my trees. Does anyone have a recommendation for a vendor for bulk wire? I need something like #14, flexible, and hopefully insulated.

Thanks!

Bruce Cheney NI7M

-----

Date: 2 Apr 93 11:58:54 EST

From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa

Subject: Where can I get old radio parts?

To: info-hams@ucsd.edu

In article <marksa-010493132640@145.1.131.9>, marksa@ecs.comm.mot.com (Mark
Salzwedel) wrote:

- > I have an old (circa 1920) Philco "Lowboy" radio I'm trying to restore and
- > I need help trying to find parts for it. If anyone has any suggestions of
- > where I can find REALLY old tubes and capacitors I'd appreciate it!

Mark-

In my experience with old radio equipment, I have found that an extremely high percentage of paper capacitors made before about 1955-1960, would develop leakage as they aged.

I'm not sure if it was merely the Florida environment that did it, or if it is a universal fact-of-life. You may get a more encouraging response from someone who has experience with capacitors that lived their life in a dry climate.

Would it be acceptable to carefully remove the wrapping from an old capacitor, and re-wrap it around a new capacitor? If the equivalent modern capacitor were somewhat smaller, you could even pour some wax or potting compound in the ends to make them look more authentic.

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

-----

Date: Fri, 2 Apr 1993 14:39:03 GMT

From: dog.ee.lbl.gov!overload.lbl.gov!agate!usenet.ins.cwru.edu!gatech!wa4mei!

ke4zv!gary@network.UCSD.EDU

To: info-hams@ucsd.edu

References <1993Mar31.163953.6169@hemlock.cray.com>,

<1993Apr1.081932.17065@ke4zv.uucp>,

<POPOVICH.93Apr1045802@morningside.cs.columbia.edu>

Reply-To : gary@ke4zv.UUCP (Gary Coffman)

Subject: Re: UHF broadcasting. (was: DESPERATE...

In article <POPOVICH.93Apr1045802@morningside.cs.columbia.edu> popovich@cs.columbia.edu (Steve Popovich) writes:
>Is this true? Just imagine, no more TVI at the neighbors' from >low-order harmonics of the higher HF ham bands...this by itself would >do wonders for ham radio's public relations :-)! Of course, with the >way most electronics seem to going, there will most likely be an >offsetting increase in front-end overload sensitivity :-(.

Yes, this the most likely plan to be adopted according to reports from the FCC's advanced television working group, as reported in \_TV Technology\_. It's spectrum compatible with NTSC transmissions, uses a digital compression method, and a multivalue modulation constellation. Output ERPs will drop from the current UHF level of 5 MW down to 100 kW or less while retaining at least the same coverage area. Since the modulation is digital, the video SNR is separate from the CNR such that signals are nearly perfect until a threshold is reached, at which point they just dissolve into noise. The data is packetized, and there will be available bandwidth for layering on other data services during periods of little picture motion. Several services are projected to be available to use the excess capacity.

# Gary

- -

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

-----

Date: Fri, 2 Apr 1993 18:21:59 GMT

From: csus.edu!netcom.com!jfh@decwrl.dec.com

To: info-hams@ucsd.edu

References <C4pH5D.Gr2@hpuerca.atl.hp.com>, <jfhC4pp4z.5sM@netcom.com>, <1993Mar31.150306.12177@cbnewsl.cb.att.com> Subject : Re: ARRL living in the past? (was Re: motive ...)

rlt@cbnewsl.cb.att.com (r l taylor) wrote:

>Just MHO, but I can see a couple of ways that could be interpreted. It >could be:

>

>"Look! We have women in the organization! (See how open-minded and tolerant

```
>we are to allow these token females to take part!)"
>
>0r:
>"Look! We have women in the organization! (This is no longer a hobby for
>men only. Lots of women are active hams these days. Ham radio is for
>*everyone*, and you don't need to be intimidated if you don't fit the old
>stereotypes.)"
>Being the eternal optimist, I choose to believe that it is the latter
>message that ARRL wishes to convey...
I think you're right, but I don't think their actions always match their
intentions. It may be that they are limited by their history, so change
will come slowly.
Jack Hamilton KD6TTL jfh@netcom.com P. O. Box 281107 SF, CA 94128-1107
Date: 2 APR 93 13:11:05
From: pa.dec.com!e2big.mko.dec.com!nntpd.lkg.dec.com!ryn.mro4.dec.com!
cimfie.enet.dec.com!taber@decwrl.dec.com
To: info-hams@ucsd.edu
References <12434@news.duke.edu>, <1993Mar31.230514.13327@ke4zv.uucp>,
<1993Apr2.152636.3017@ryn.mro4.dec.com>
Subject : Re: 2 meter phone calls?
In article <1993Apr2.152636.3017@ryn.mro4.dec.com>, randolph@est.enet.dec.com (Tom
Randolph) writes...
>I had a thought this morning (wow!)... what about the sort of thing you hear
>all the time - "I love my Yaesu ZXY3210" or "HRO is a great place to buy a
>radio"...? Could these be construed as facilitating the business of Yaesu or
>HRO? I couldn't decide.
That's absolutely correct. You can't say you like your radio on the
radio. You also can't exchange information about the weather if the
weather in your location would be appealing to someone who might hear
the comment. Because then local tourism might benefit. It follows that
you shouldn't give your location lest someone be tempted to visit, which
may bring about the sale of gasoline, nor should you mention what kind
```

of power you use, since batteries, solar panels and \*commercial\* power

are all purchased. (It's probably OK if you've stolen the power.)

It's been covered in depth here before, but you cannot use the radio to solicit students at radio classes, which result in the sale of books, radios and code paraphernalia. But I think to be safe, you really shouldn't talk to anyone on the radio because someone hearing you might be tempted to get a license and \*purchase\* a rig of their own.

If you must talk, you should confine your comments to "You are 59, Q-R-Zed?" This has always been a sore point with scofflaw ragchewers.

>>>==>PStJTT \_\_\_\_\_ Date: Fri, 2 Apr 1993 18:37:28 GMT From: csus.edu!netcom.com!jfh@decwrl.dec.com To: info-hams@ucsd.edu References <1p7g6cINN4q1@morrow.stanford.edu>, <jfhC4onx8.4I4@netcom.com>, <1pclsg\$af8@transfer.stratus.com> Subject: Re: ARRL living in the past? (was Re: motive ...) fms@sw.stratus.com (Faith Senie) wrote: >> 2) QST's attitude towards women hams seems to be somewhat condescending. The ARRL's intentions seem to be good, but not their implementation. >> >> >Hi Jack, >I'm curious why you put this in here. What have you seen that would lead >you to say this? The treatment I have gotten from the ARRL is identical >to that which my husband gets, i.e. very good to excellent, with few exceptions.

The leadership of the ARRL is not very well balanced (look at the names of the section managers and board of directors in QST, guess the genders that go with the names, and calculate the ratios). I'm sure that's partly historical - it takes a while for people to rise through the ranks - but the imbalance is definitely there.

Half the examinees when I took my test were women. I wonder how that compares with examinees nationally, and what the gender ratio is at lower levels of the ARRL.

But why do I think that the ARRL's attitude toward women is somewhat condescending? Perhaps it's a result of reading Connie Dunn's column, "YL

News", in QST. From April's column:

"I talk on YL nets basically because I can meet a lot of YLs. And it's not trivial information that I baked a pie or made a quilt. But telling it to an OM is like an OM telling me he just rebuilt a motor: uninteresting," she exclaims!

She any sterotypes there?

The problem isn't that there are women who like to bake pies, it's the division of the world into ladies and pies, and men and motors.

That's just that particular columnist, of course, but QST doesn't present much in the way of balance.

- -

Jack Hamilton KD6TTL jfh@netcom.com P. O. Box 281107 SF, CA 94128-1107

-----

Date: Fri, 2 Apr 1993 18:51:33 GMT

From: usc!cs.utexas.edu!utnut!torn!watserv2.uwaterloo.ca!watmath!watcgl!

watpix.uwaterloo.ca!awpaeth@network.UCSD.EDU

To: info-hams@ucsd.edu

References <1993Mar20.4727.8761@dosgate>, <1993Mar21.193915.8663@ssc.com>,

<jfhC4Cpv8.Axp@netcom.com>x.uwat

Subject : Re: Hamming in International Waters (was:Re: 2 ham licences ?)

Harv Hobson (jhobson@SU19F.ess.harris.com) makes the great quip: >But, what if your ship sank and you were in an innertube in international >waters? Could you legally order pizza via amateur radio? :)

My retort:

"I'll take it delivered: 'thirty minutes or its FREE'. AND HOLD THE ANCHOVIES!"

/Alan Paeth VE3AWP (and) KD3XG dual citizen/dual bander

PS - And where should VE3-land/Ontario and Pennsylvania (my KD3 QTH) happen to adjoin? Along a narrow line in the middle of Lake Erie! Always wanted to float out there and contest. Hitting repeaters using a "Rubber Ducky" takes on a whole new meaning!

-----

Date: Fri, 2 Apr 1993 18:55:39 GMT

From: csus.edu!netcom.com!jfh@decwrl.dec.com

To: info-hams@ucsd.edu

References <1p7g6cINN4q1@morrow.stanford.edu>, <1993Mar30.055939.18122@bongo.tele.com>, <C4sJ0H.F0G@athena.cs.uga.edu>% Subject : Re: motive ...

mcovingt@aisun3.ai.uga.edu (Michael Covington) wrote:

>Why should the ARRL make any statements about sexuality whatsoever?

They shouldn't. So why do they? (The statement being that they won't accept ads from LARC.)

>I don't know the whole rationale of why the ARRL refused the ad for the >organization of homosexual hams, BUT: >

>(1) apparently that organization \_itself\_ discriminates on the basis of >sexual orientation (isn't that its purpose????!);

As far as I know, LARC does not discriminate on the basis of sexual orientation. I'm sure they'd take you as a member if you wanted to join.

The purpose of gay/lesbian subsets of larger organizations is typically to provide a comfortable atmosphere. You've seen the kind of dislike and misunterstanding of gay people which has appeared here recently; if you were gay, would you want to hang out with those folks?

- >(2) I personally would approve of it if the ARRL would follow a policy
  >of not publishing material that tends to divide the ham community by
  >being controversial in ways not directly relevant to radio; this would
  >include:
- > ads for partisan political causes;
- > ads for religious groups;
- > ads advocating illegal practices;
- > ads appealing to people of specific ethnic background to the
  >exclusion of others;
- > ads mentioning sexual orientation or behavior.

But that's not their policy. They accept ads for the Jewish amateur radio group, for example. I don't see that it's any different.

We have a basic disagreement here. I think it's very good to encourage diversity. If more people become active in radio because they can find a group they're comfortable with, so much the better!

The ARRL might profit from looking at what happened at the Sierra Club. There was an attempt (about 8-10 years ago, I think), to form a lesbian/gay interest group within the San Francisco chapter. Either the chapter or the national said "No way". A long struggle ensued, which finally resulted in the group being set up. It immediately became one of the most active groups in the chapter. They have "service trips" at least once a month. They repaired trails in Muir Woods. They dug out rocks at Alcatraz. They put on monthly meetings with speakers on various topics. All of these were things that have little to do with sexual orientation, but that people decided to do because they had found a friendly group to do them with. Now even some of the people who originally opposed the idea concede that it has worked and worked well.

- -

-----

Jack Hamilton KD6TTL jfh@netcom.com P. O. Box 281107 SF, CA 94128-1107

-----

Date: Fri, 2 Apr 1993 16:22:24 GMT

From: dog.ee.lbl.gov!overload.lbl.gov!agate!usenet.ins.cwru.edu!gatech!wa4mei!

ke4zv!gary@network.UCSD.EDU

To: info-hams@ucsd.edu

References <e0En03Gxcevj00@amdahl.uts.amdahl.com>,

<cole.124.733692506@soldev.tti.com>, <12US03J8cfzW00@amdahl.uts.amdahl.com>

Reply-To : gary@ke4zv.UUCP (Gary Coffman)
Subject : Re: RFD [rec.radio.amateur reorg]

In article <12US03J8cfzW00@amdahl.uts.amdahl.com> ikluft@uts.amdahl.com (Ian
Kluft) writes:

>That sure doesn't seem like an epidemic of cross-posting. Considering that >rec.aviation before its reorg was very much like rec.radio.amateur.misc today >(including traffic volume and attached mail lists) I really don't think it's >going to be a problem.

>So, if we \*do\* split rec.radio.amateur, we'll have several other groups with >better signal-to-noise ratios, making a much more enjoyable environment for >Hams, considers what varied interests we tend to have.

My contention, based on my own observations, is that while there are certainly people in amateur radio with narrow focus, leading to varied interests in the community, by far the majority of amateurs \*individually\* have many varied interests. That means they will cross the new group lines regularly, often in the \*same\* posting, or thread. Thus split groups become less useful to them unless they resort to extensive

crossposting to encompass the various viewpoints they are addressing. That's not a terrible handicap to those with direct Usenet access and proper threaded readers, nn allows merging of multiple groups into a phantom supergroup for example, but it plays hell with the Email users. They have to choose which mail list to join, if indeed multiple mail lists are created. If they join all the lists, then crossposts become a volume issue because they are mailed separate copies in each group. If Brian doesn't create new mail lists, then those people are cut off from areas of discussion.

Someone suggested crossposting everything to misc. That might be a workable way to include the mail list users, but then the group split just becomes a redundant way of managing threads with less individual control than offered by standard threaded readers. If you add in the general Usenet tendency to never edit newsgroup lines when the topic shifts, then even those who want blinders placed on them from outside by an imposed group structure won't be pleased as off topic posts fill their exclusive clubs.

I think the ham community is sufficiently different from the aviation community that what works reasonably well there doesn't necessarily apply here. If improved signal to noise level is what's wanted, I think only moderated groups can make it happen. One man's signal is often another man's noise. Without someone ruling with an iron hand, the wheat and chaff won't land in the right piles.

# Gary

- -

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

-----

End of Info-Hams Digest V93 #411 \*\*\*\*\*\*\*\*\*\*\*